

What is claimed is:

1. A low noise pneumatic tire having a tread, the tread having a radially inner surface, a belt-shaped sound absorbing member being mounted on the radially inner surface of the tread by a fixing elastic band, the belt-shaped sound absorbing member being formed of a porous material and having a width of 40% to 90% of a maximum width of the tire and a thickness of 5mm to 50 mm.
2. A low noise pneumatic tire according to claim 1, wherein the belt-shaped sound absorbing member is formed in a curved manner widthwisely and/or longitudinally thereof so as to have a shape extending along the radially inner surface of the tread.
3. A low noise pneumatic tire according to claim 2, wherein the belt-shaped sound absorbing member has a radially outer surface formed in the curved manner with a radius of curvature, the radius of curvature of the radially outer surface being 0.7 to 1.3 times longer than that of the radially inner surface of the tread.
4. A low noise pneumatic tire according to any one of claims 1 to 3, wherein the belt-shaped sound absorbing member has a radially inner surface and a radially outer surface, at least one of the radially inner and outer surfaces of the belt-shaped sound absorbing member having notches that extend widthwisely of the belt-shaped sound absorbing member and are disposed at prescribed intervals longitudinally of the belt-shaped sound absorbing member.
5. A low noise pneumatic tire according to claim 4, wherein one

of the radially inner and outer surfaces has widthwisely extending notches, and the other of the radially inner and outer surfaces has longitudinally extending notches.

6. A low noise pneumatic tire according to claim 4 or 5, wherein the widthwisely extending notches each have a depth of 20% to 90% of the thickness of the belt-shaped sound absorbing member, the intervals of the widthwisely extending notches being 10 mm to 80 mm.

7. A low noise pneumatic tire having a tread, the tread having a radially inner surface, a belt-shaped sound absorbing member being mounted on the radially inner surface of the tread by a fixing elastic band, the belt-shaped sound absorbing member being formed of a porous material, the belt-shaped sound absorbing member being formed in a curved manner widthwisely and/or longitudinally thereof so as to have a shape extending along the radially inner surface of the tread.

8. A low noise pneumatic tire according to claim 7, wherein the belt-shaped sound absorbing member has a radially outer surface formed in the curved manner with a radius of curvature, the radius of curvature of the radially outer surface being 0.7 to 1.3 times longer than that of the radially inner surface of the tread.

9. A low noise pneumatic tire according to claim 7 or 8, wherein the belt-shaped sound absorbing member has a radially inner surface and a radially outer surface, at least one of the radially inner and outer surfaces of the belt-shaped sound absorbing

member having notches that extend widthwisely of the belt-shaped sound absorbing member and are disposed at prescribed intervals longitudinally of the belt-shaped sound absorbing member.

10. A low noise pneumatic tire according to claim 9, wherein one of the radially inner and outer surfaces has widthwisely extending notches, and the other of the radially inner and outer surfaces has longitudinally extending notches.

11. A low noise pneumatic tire according to claim 9 or 10, wherein the widthwisely extending notches each have a depth of 20% to 90% of the thickness of the belt-shaped sound absorbing member, the intervals of the widthwisely extending notches being 10 mm to 80 mm.

12. A low noise pneumatic tire having a tread, the tread having a radially inner surface, a belt-shaped sound absorbing member being mounted on the radially inner surface of the tread by a fixing elastic band, the belt-shaped sound absorbing member being formed of a porous material and having a radially inner surface and a radially outer surface, at least one of the radially inner and outer surfaces of the belt-shaped sound absorbing member having notches that extend widthwisely of the belt-shaped sound absorbing member and are disposed at prescribed intervals longitudinally of the belt-shaped sound absorbing member.

13. A low noise pneumatic tire according to claim 12, wherein one of the radially inner and outer surfaces has widthwisely extending notches, and the other of the radially inner and outer

surfaces has longitudinally extending notches.

14. A low noise pneumatic tire according to claim 12 or 13, wherein the widthwisely extending notches each have a depth of 20% to 90% of the thickness of the belt-shaped sound absorbing member, the intervals of the widthwisely extending notches being 10 mm to 80 mm.

15. A low noise pneumatic tire according to any one of claims 1 to 14, wherein the belt-shaped sound absorbing member has a radially inner surface in a form of an uneven surface, the uneven surface being 20 mm or less in unevenness.

16. A low noise pneumatic tire according to any one of claims 1 to 15, wherein the fixing elastic band is formed of a synthetic resin, the fixing elastic band being 10 mm to 30 mm in width, and 0.5 mm to 2.0 mm in thickness.

17. A low noise pneumatic tire according to claim 16, wherein the fixing elastic band is formed of a polypropylene resin having flexural modulus of elasticity ranged from 1100 MPa to 1800 MPa.